

III. SUMMARY OF INTERPRETIVE THEMES

The 1987 State Parks Act defines the purposes of the state parks system. It establishes that:

The State of North Carolina offers unique archaeologic, geologic, biologic, scenic and recreation resources. These resources are part of the heritage of the people of this State. The heritage of a people should be preserved and managed by those people for their use and for the use of their visitors and descendants.

It further provides that:

Park lands are to be used by the people of this State and their visitors in order to promote understanding of and pride in the natural heritage of this State.

One of the best methods of meeting these purposes is through environmental education. The definition of environmental education as set forth in *The North Carolina Environmental Education Plan* is given below.

Environmental Education is an active process that increases awareness, knowledge and skills that result in understanding, commitment, informed decisions and constructive action to ensure stewardship of all interdependent parts of the earth's environment.

Raven Rock State Park is well suited to environmental education, with its excellent representation of geology and habitat types found throughout the fall zone between the Piedmont and Coastal Plain provinces.

Raven Rock State Park has three primary interpretive themes and six secondary themes. The primary themes are the geology of Raven Rock, the ecology of the fall zone, and the natural and cultural history of the Cape Fear River.

PRIMARY INTERPRETIVE THEMES

Geology of Raven Rock

The geology of the park is featured in the Environmental Education Learning Experience (EELE), "Raven Rock, Then and Now." Most of the park's unique geological features result from its location in the fall zone – the area where the hard resistant rocks of the Piedmont meet the sediments and softer rocks of the Coastal Plain. Raven Rock, a large outcrop along the Cape Fear River, is part of a metamorphic rock feature called the Big Lake–Raven Rock schist. This rock feature is part of the Carolina Terrane, an ancient volcanic island arc that formed off the coast of Gondwanaland (proto-Africa) about 600 million years ago. Students and other park visitors can participate in EELE activities or interpretive programs that help them discover the composition, geomorphology and geologic history of Raven Rock. They can also explore the gravel terraces on higher ridges within the park that were deposited on top of the Raven Rock feature by the ancestral Cape Fear River.

And, they can observe how the modern Cape Fear River continues to sculpt and erode the rock today, such as at Fish Traps and Lanier Falls.

The Ecology of the Fall Zone

As a result of its unique position in the fall zone, the park harbors a remarkable diversity of natural communities and species. The park is located in Harnett County where the Piedmont, Sandhills and Coastal Plain come together. Thus, ecological characteristics of all three regions are found within the park. Of particular significance are examples of several natural communities, including Piedmont/Coastal Acidic Cliff, Piedmont/Coastal Heath Bluff, Granitic Flatrock, Piedmont/Mountain Levee Forest, and remnant examples of Piedmont Longleaf Pine Forest. Interpretive programs, guided trail hikes and a self-guided nature trail allow park visitors to explore relationships between the geology and the fauna and flora, e.g., flat rocks, cliff faces, vernal pools and basic soils. Visitors can also learn to recognize the natural communities that identify the Piedmont–Coastal Plain interface.

Natural and Cultural History of the Cape Fear River

Through various park interpretive programs and wayside exhibits, visitors can learn about the natural and cultural history of the Cape Fear River. The headwaters originate in the central and eastern Piedmont with a drainage basin about 3,400 square miles upstream from the park. Bisected by the Cape Fear River, Raven Rock State Park provides an excellent location to study our state's largest river basin. Visitors and students can explore several of the streams in the park that feed the river. Participants on guided hikes can determine water quality by testing physical properties and examining macro-invertebrates. The park has a rich cultural history related to the river. Prior to development of the railroad system in the late 1800s, the Cape Fear River was the primary artery of transportation for people and goods between Wilmington and points inland. Both the Northington Ferry and a series of locks and dams were constructed on what is now park property.

SECONDARY INTERPRETIVE THEMES

Secondary themes for the park support and supplement the primary themes. Six secondary interpretive themes have been identified. They are:

1. Ecological disturbances (fire, insects, wind throws from hurricanes or tornados, and floods)
2. Fire ecology and management
3. Invasive, exotic species
4. Environmental issues (emphasizing water and air quality)
5. Nocturnal natural history
6. Outdoor Recreation (hiking, backpacking, fishing, canoeing, horseback riding, etc.)